



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

APR 15 1991

ARO007

88216521

OFFICE OF
AIR AND RADIATION

MEMORANDUM

SUBJECT: Bluewater Uranium Mine Preliminary Assessment Data

FROM: Richard J. Guimond, Director (ANR-458)
Office of Radiation Programs

TO: Jeffrey Zelikson, Director
Hazardous Waste Management Division, Region 9

This is an interim response to a memorandum, dated January 29, 1991, to me from Donald C. White, Chief, Field Operations Branch, Region 9. I understand that Mr. White also sent a nearly identical memorandum to Steven Luftig, Director of Superfund's Environmental Response Division. These memoranda from Mr. White requested the assistance of the Office of Radiation Programs (ORP) and the Office of Solid Waste and Emergency Response (OSWER) in interpreting the results of a radiological survey of inactive uranium mines in Bluewater, NM. Mr. White also asked for help in determining whether the sites warrant either a removal or remedial action under the Comprehensive Environmental Response, Compensation and Liability Act, as amended by the Superfund Amendments and Reauthorization Act (CERCLA/SARA).

On March 14, my staff briefed me on the Bluewater sites. We examined the preliminary assessment reports and other information provided by the Navajo Superfund Office (NSO), the Public Health Advisory of the Agency for Toxic Substances and Disease Registry (ATSDR) dated November 21, 1990, and the results of a preliminary radiation survey carried out by members of my office at our Las Vegas Facility on November 13 through 16, 1990.

The memorandum requires answers to four questions: 1) Are the existing data adequate for a determination of the risks associated with the sites; 2) if so, what are the levels of risk; 3) by what scientifically sound and legally defensible criteria can and should OSWER undertake a removal (as opposed to a remedial) action; and, 4) are there any relevant and useful precedents?

Based on our evaluation of the information available, I believe that there may be a significant risk posed by at least one of the sites. I feel, however, that in order to make informed recommendations in response to the memorandum, it is necessary to obtain additional information. This need was discussed in depth in a telephone conversation on March 21, involving Mr. White; Bob Dyer, Gregg Dempsey, Colleen Petullo, and Tony Wolbarst of my staff; Michael Bandrowski, the Region 9 Radiation Program Manager; and Karen Tomimatsu and Pamela Harris of OSWER HQ.

I have directed our Las Vegas Office to draft a sampling and data analysis workplan for assessing releases of radionuclides into pathways not already evaluated. The assessment would cover:

- radon and gamma-ray exposure in homes (of concern because radium-bearing materials may have been used in construction);
- radon emanating from mine vents;
- radionuclides in all realistically accessible sources of ground and surface waters;
- radionuclides entering the food chain.

In my opinion, it is also important to carry out a more extensive, and statistically more rigorous, gamma-ray survey of the sites, taking fully into account land-use by the inhabitants. All components of this extended survey should include involvement of and close cooperation with the Navajo Superfund Office and Indian Health Service. Further, I suggest that you consider an aerial radiological survey of the sites in order to provide an overview of the extent of the contamination problem.

Since it may be appropriate to consider these sites for remedial as well as, or instead of, removal action, the additional data should be obtained in a form suitable for site scoring using the revised Hazard Ranking System (HRS). Section 7 of the revised HRS provides instruction for evaluating sites containing radioactive substances.

I have requested the assistance of Superfund's Emergency Response Division in determining what criteria are or have been used to trigger Agency removal actions. Also, I am coordinating

Items above
are discussed
in AR 11,
Page 6

with them and with Michael Bandrowski in soliciting input on this issue from the ten Regional Superfund Offices. In view of the significant legal implications of any recommendations that I may offer, I feel that Regional Council and/or OSWER Council should be actively involved in the process.

I appreciate the importance of this problem, and consider it to be of high priority. I expect that as soon as more complete information on the nature of the hazards at Bluewater becomes available, I shall be able to provide a more complete response to the questions posed in the memorandum.

cc: Steven Luftig (OS-210)
Donald C. White, EPA/Region 9
Martin Halper (ANR-461)
Raymond Brandwein (ANR-458)
Robert Dyer (ANR-461)
Anthony Wolbarst (ANR-461)
Mark Mjoness (OS-210)
Pamela R. Harris (OS-210)
Karen Tomimatsu (OS-210)
Michael Bandrowski, EPA/Region 9
Robert Bornstein, EPA/Region 9
William Weis, EPA/Region 9
Gregg Dempsey, ORP/LVF
Colleen Petullo, ORP/LVF
Joanne Manygoats, NSO
William Nelson, ATSDR